

FOREST INSECT INFESTATIONS - WEISER NATIONAL FOREST - 1936

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October 27th and 28th were spent in company with Deputy Supervisor Hoffman in making an examination of the ponderosa pine stands of the Weiser National Forest for the purpose of determining the present status of insect conditions. Though this examination was extensive in character, it is believed that representative samples were covered and that the reaction secured depicted conditions throughout the forest.

Mill Creek - North of Council

In this drainage a number of ponderosa pine trees were recorded as having died during the past few years. Though one large tree was infested with a heavy brood of the western pine beetle (Dendroctonus brevicornis), in the others there was no basal evidence at least of primary insect attack. On some of these trees the dry bark still adhered to the wood, while others revealed a sour-asp condition indicating the destruction of at least a large part of the crown by bark beetles. There was considerable evidence of top killing throughout this area, as a number of trees were recorded with the upper portion of the crown either dead or dying. As there had been no recent physical disturbances within this timber stand, the occurrence of this rather unhealthy condition was difficult to explain. Feeling that some abnormal environmental condition might be reflected in growth, a few increment cores were taken from green trees. These cores show that

during the past few years the average annual radial increment has been only .84 mm. while for the preceding five years, 1927 to 1931 inclusive, the average annual growth was 1.90 mm. This marked reduction in growth can be taken as an indication of a lowering of the resistance of trees to the attacks of secondary insects.

An unsuccessful attempt was made to establish a correlation between the annual precipitation for this area and the marked reduction in tree growth. Weather records from New Meadows, Idaho were utilized for this purpose, though it was realized that they would not depict conditions within the area where the cores were taken. Furthermore, as the relation of rainfall and tree growth is not too thoroughly understood, it is not only possible but very probable that deficiencies in annual precipitation were responsible for the conditions recorded.

Crooked River - Paradise Flats

An area was examined on the head of Crooked River (Paradise Flats), where the heaviest losses of timber were reported as occurring. Enroute to this area via the Hornet Creek Ranger Station a few trees were observed which showed the same condition as recorded in the Mill Creek area. The tops of these trees were dead, with a sour-sap condition, or flathead borer work at the base.

The Paradise Flats support a very fine stand of ponderosa pine. The timber is mature and, as in all such timber stands, there is an infestation of the western pine beetle. From the presence of the scattered snags one can visualize a rather light annual loss of

timber for the past decade or more. However, as many of the dead trees have been cut for wood, it is difficult to secure a very definite reaction as to the seriousness of these losses. During 1934 and 1935 the infestation apparently increased somewhat in severity. One large group of 33 dead trees and several smaller ones were examined. In these groups there were a few trees harboring 1936 broods of the western pine beetle, though it would appear that there had been a marked decrease in the severity of the infestation. Though control measures are not considered necessary at this time, it is believed that if the actual losses were ascertained they would be in excess of what has been assumed. It is understood that nearly all of the timber in this area is privately owned, which would perhaps require some thoughts of cooperation in the institution of any future surveys or control operations.

Weiser River - North of Council

A trip up the Weiser River towards New Meadows revealed an endemic infestation of the western pine beetle, which one would expect to find in all mature ponderosa pine stands. The infestation is scattered and though not serious in the area viewed during this examination, it is fully realized that more serious conditions could exist in areas in the more remote portions of the drainage.

Brownlee Ranger Station

A trip was made to the Brownlee Ranger Station to inspect an area of dead Douglas fir trees. This area was located on top of a

high mountain ridge back of the ranger station, and as time was not available, a detailed examination was not made. However, from the appearance of the foliage on the dead and dying trees it was rather evident that they had been killed by the Douglas fir beetle. In comparing the number of more recently attacked trees with those from which the foliage has fallen, it would seem that there has been no increase in the severity of the infestation and that control measures were unnecessary.

The mountain pine beetle infestation in the lodgepole pine stands of the Weiser Forest seems to have died down. There is plenty of evidence of the devastation which has occurred, though very little new work was recorded.

In summarizing one's reaction to conditions within the areas covered by this examination, it would seem that there are no existing situations which are alarming, but it is recommended that during the 1937 season the ponderosa pine stands be covered by an extensive survey for the purpose of securing an accurate depiction of the losses which are occurring as well as the need for control. If this recommendation is approved, the Coeur d'Alene Laboratory will be glad to prepare a more detailed statement relative to the cost of the operation and to assume responsibility for the administration of the survey.

Respectfully submitted,

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